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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,666	07/30/2001	Nico J.M. Rijkhoff	P66606USO	9516
136	7590	03/26/2004		
JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004				
			EXAMINER OROPEZA, FRANCES P	
			ART UNIT 3762	PAPER NUMBER 12

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/830,666

Applicant(s)

RIJKHOFF ET AL.

Examiner

Frances P. Oropeza

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 1/8/04 (Amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 22-29 and 40-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-29 and 40-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

1. The Applicant's arguments filed 1/8/04 are convincing, hence the rejection of record is withdrawn and a new rejection established in the subsequent paragraphs.

***Claim Rejections - 35 USC § 103***

2. Claims 22-29 and 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boveja et al. (US 6505074) in view of Glover (US 3662758) and further in view of Wernicke et al. (US 5188104).

Boveja et al. disclose a method for electrical neural stimulation to treat bladder over-activity providing neural stimulation for detrusor inhibition using programmed stimulation (abstract; col. 1 @ 19-23; col. 1 @ 33- col. 2 @ 38; col. 2 @ 45 – col. 3 @ 32; col. 4 @ 25-35; col. 5 @ 4-22; col. 7 @ 49 – col. 8 @ 11; col. 10 @ 5-48; col. 12 @ 13-21). Boveja et al. teach a bladder event (impulses in the mechanoreceptor afferents) can precipitate a full-blown micturition reflex, and the increased activity (electrical pulses) associated with the reflex control of the striated urethral sphincter controls the micturition process (col. 2 @ 10 – 21).

As discussed in the previous paragraph of this action, Boveja et al. disclose the claimed invention except for: 1) using detected signals (indicative of a bladder event) to control bladder stimulation to inhibit detrusor contractions of the bladder, and 2) estimating bladder volume and actuating an alert signal when the predetermined threshold for bladder volume has been reached.

Glover discloses a stimulation apparatus for use with organs and teaches:

- using detected signals (indicative of a bladder event) to control bladder stimulation for the purpose of inhibiting detrusor contractions of the bladder base on the bladder volume, and
- estimating bladder volume based on the amplitude and/or timing of signals and actuating an external alert response/ indicator when the threshold has been reached for the purpose of notifying the user of the need for mitruition. (As to the amplitude, Glover teaches monitoring impedance and Wernicke et al. (US 5188104) teach it is well known that amplitude of an impedance signal varies depending on fullness of the organ being monitored (col. 10 @ 33-37)).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have: 1) detected signals (indicative of a bladder event) to control bladder stimulation and 2) estimated bladder volume based on the amplitude and/ or timing of signals and actuating an alert signal when the predetermined threshold for bladder volume is reached in the Boveja et al. system in order to provide more precise indication of the status of the bladder which is being controlled, hence enabling customization of the neural stimulation based on the needs of the particular patient (abstract; figure 2; col. 1 @ 57- col. 2 @ 4; col. 3 @ 16-50; col. 5 @ 36-46).

***Statutory Basis***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fran Oropeza, telephone number is (703) 605-4355. The Examiner can normally be reached on Monday – Friday 9 a.m. to 5 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Angela D. Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communication and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist, telephone number is (703) 308-0858.

Frances P. Oropeza  
Patent Examiner  
Art Unit 3762

*376*  
*3/20/04*

  
**BRIAN L. CASLER**  
**SUPERVISORY PATENT EXAMINER**  
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